

REMARKS

Claims 1 and 21 have been amended to incorporate the recitations of claims 2 and 22, respectively, and claims 2 and 22 have been canceled accordingly. Also, the claims have been amended to resolve issues raised by the Examiner under 35 U.S.C. 112, second paragraph.

Entry of the above amendment is respectfully requested.

Rejection under 35 U.S.C. 112, Second Paragraph

On page 2 of the Office Action, in paragraph 2, claims 7, 10, 12-18, 24 and 27-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite.

In view of the above amendments, Applicants submit that the issues raised by the Examiner have been resolved, and thus withdrawal of the rejection is respectfully requested.

Anticipation Rejection

On page 2 of the Office Action, in paragraph 4, claims 21-22 and 24-35 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 0048985 or US 6,676,851.

In response, Applicants note that US 6,676,851 describes in columns 27-28, line 45, a compound having a transition temperature from the liquid crystal to the isotropic phase of 27°.

The mixtures of the present invention comprise additives with a transition temperature of 20° or lower.

Hence, the present invention is different from US 6,676,851 and therefore novel over this reference.

Further, it is noted that claim 22 was subsequently indicated in the present Office Action as containing allowable subject matter, so it is believed that claim 22 was inadvertently included in this rejection, and it is submitted that the amendment of claim 21 to incorporate the recitations of claim 22 overcomes this rejection.

Accordingly, withdrawal of this rejection is respectfully requested.

Obviousness Rejection

On page 5 of the Office Action, in paragraph 6, claims 1, 4-20 and 36-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 0048985 or US 6,676,851.

In response, Applicants again note that US 6,676,851 describes in columns 27-28, line 45, a compound having a transition temperature from the liquid crystal to the isotropic phase of 27°.

In contrast, the present invention concerns compounds having a transition temperature from the liquid crystal to the isotropic phase of 20°C or lower.

There is no teaching in US 6,676,851 that and how compounds having a transition temperature to the isotropic phase of 20°C or lower are accessible.

It is even more surprising that with additives found in the present invention having low transition temperatures the manufacture of liquid crystalline films is improved as shown in Example 9 on pages 57-60.

Further, the compatibility of mixtures of liquid crystals is improved in the presence of an additive according to the invention as shown in Example 11 on pages 62 and 63.

The films exhibit improved film quality compared to liquid crystalline mixtures with additive as shown in Example 10, on page 60-62.

Further, in US 6,676,851, column 2, from lines 45 to 59, it is described that lateral substitution of liquid crystals is very sensitive and undesired effect might occur:

Laterally substituted mesogenic compounds are known from WO95/24454, WO 95/24455, U.S. Pat. Nos. 5,650,534, 5,593,617, 5,567,347 and 5,707,544.

However, many of these compounds are not suitable for preparing LCP films and networks that are substantially free of tilt domains.

Hence, a skilled person would not be motivated to change the teaching of US 6,676,851 because there is no hint provided in US 6,676,851.

Further, it is noted that claim 1 has been amended to incorporate the recitations of claim 2, which has not been included in this rejection, so it is submitted that this rejection is overcome as a result.

Therefore, the present invention is non-obvious over the cited art, and withdrawal of this rejection is respectfully requested.

Allowable Subject Matter

On page 6 of the Office Action, in paragraph 7, the Examiner has objected to claims 2-3 and 22-23 as being dependent upon a rejected base claim, but has indicated that they would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In response, Applicants have amended claims 1 and 21 to incorporate the recitations of claims 2 and 22, respectively. Accordingly Applicants submit that this objection has been overcome, and withdrawal of this objection is respectfully requested.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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